U.S. Department of Education
2009 No Child Left Behind - Blue Ribbon Schools Program

Type of School: (Check all that apply) [**X**] Elementary [] Middle [**X**] High [] K-12 [] Other
[] Charter [] Title I [**X**] Magnet [] Choice

Name of Principal: Mr. Robert E. Hunter, Ed.S.

Official School Name: Brewbaker Technology Magnet High School

School Mailing Address:
4405 Brewbaker Drive
Montgomery, AL 36116-4205

County: Montgomery State School Code Number*: 051-0097

Telephone: (334) 284-7100 Fax: (334) 284-7110

Web site/URL: www.brewtech.org E-mail: robert.hunter@mps.k12.al.us

I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I - Eligibility Certification), and certify that to the best of my knowledge all information is accurate.

_____ Date _____
(Principal's Signature)

Name of Superintendent*: Mr. John Dilworth

District Name: Montgomery County Tel: (334) 223-6710

I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I - Eligibility Certification), and certify that to the best of my knowledge it is accurate.

_____ Date _____
(Superintendent's Signature)

Name of School Board President/Chairperson: Ms. Beverly Ross

I have reviewed the information in this application, including the eligibility requirements on page 2 (Part I - Eligibility Certification), and certify that to the best of my knowledge it is accurate.

_____ Date _____
(School Board President's/Chairperson's Signature)

**Private Schools: If the information requested is not applicable, write N/A in the space.*
Original signed cover sheet only should be mailed by expedited mail or a courier mail service (such as USPS Express Mail, FedEx or UPS) to Aba Kumi, Director, NCLB-Blue Ribbon Schools Program, Office of Communications and Outreach, US Department of Education, 400 Maryland Ave., SW, Room 5E103, Washington, DC 20202-8173.

PART I - ELIGIBILITY CERTIFICATION

The signatures on the first page of this application certify that each of the statements below concerning the school's eligibility and compliance with U.S. Department of Education, Office for Civil Rights (OCR) requirements is true and correct.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even K-12 schools, must apply as an entire school.)

2. The school has made adequate yearly progress each year for the past two years and has not been identified by the state as "persistently dangerous" within the last two years.

3. To meet final eligibility, the school must meet the state's Adequate Yearly Progress (AYP) requirement in the 2008-2009 school year. AYP must be certified by the state and all appeals resolved at least two weeks before the awards ceremony for the school to receive the award.

4. If the school includes grades 7 or higher, the school must have foreign language as a part of its curriculum and a significant number of students in grades 7 and higher must take the course.

5. The school has been in existence for five full years, that is, from at least September 2003.

6. The nominated school has not received the No Child Left Behind – Blue Ribbon Schools award in the past five years, 2004, 2005, 2006, 2007, or 2008.

7. The nominated school or district is not refusing OCR access to information necessary to investigate a civil rights complaint or to conduct a district-wide compliance review.

8. OCR has not issued a violation letter of findings to the school district concluding that the nominated school or the district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan from the district to remedy the violation.

9. The U.S. Department of Justice does not have a pending suit alleging that the nominated school or the school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.

10. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the school or school district in question; or if there are such findings, the state or district has corrected, or agreed to correct, the findings.

PART II - DEMOGRAPHIC DATA

All data are the most recent year available.

DISTRICT (Questions 1-2 not applicable to private schools)

1. Number of schools in the district:

37	Elementary schools
5	Middle schools
6	Junior high schools
8	High schools
2	Other
58	**TOTAL**

2. District Per Pupil Expenditure: 7339

   Average State Per Pupil Expenditure: 8403

SCHOOL (To be completed by all schools)

3. Category that best describes the area where the school is located:

   [X] Urban or large central city
   [ ] Suburban school with characteristics typical of an urban area
   [ ] Suburban
   [ ] Small city or town in a rural area
   [ ] Rural

4. 2 Number of years the principal has been in her/his position at this school.

   5 If fewer than three years, how long was the previous principal at this school?

5. Number of students as of October 1 enrolled at each grade level or its equivalent in applying school only:

Grade	# of Males	# of Females	Grade Total	Grade	# of Males	# of Females	Grade Total
PreK	0	0	0	**7**	0	0	0
K	0	0	0	**8**	0	0	0
1	0	0	0	**9**	62	80	142
2	0	0	0	**10**	59	90	149
3	0	0	0	**11**	41	64	105
4	0	0	0	**12**	50	58	108
5	0	0	0	**Other**	0	0	0
6	0	0	0				
		TOTAL STUDENTS IN THE APPLYING SCHOOL					504

6. Racial/ethnic composition of the school:

1 %	American Indian or Alaska Native
5 %	Asian
55 %	Black or African American
2 %	Hispanic or Latino
0 %	Native Hawaiian or Other Pacific Islander
37 %	White
0 %	Two or more races
100 %	**Total**

Only the seven standard categories should be used in reporting the racial/ethnic composition of your school. The final Guidance on Maintaining, Collecting, and Reporting Racial and Ethnic data to the U.S. Department of Education published in the October 19, 2007 *Federal Register* provides definitions for each of the seven categories.

7. Student turnover, or mobility rate, during the past year: 2 %

This rate is calculated using the grid below. The answer to (6) is the mobility rate.

(1)	Number of students who transferred ***to*** the school after October 1 until the end of the year.	0
(2)	Number of students who transferred ***from*** the school after October 1 until the end of the year.	8
(3)	Total of all transferred students [sum of rows (1) and (2)].	8
(4)	Total number of students in the school as of October 1.	472
(5)	Total transferred students in row (3) divided by total students in row (4).	0.017
(6)	Amount in row (5) multiplied by 100.	1.695

8. Limited English proficient students in the school: 1 %

Total number limited English proficient 4

Number of languages represented: 2
Specify languages:

Chinese and Korean

9. Students eligible for free/reduced-priced meals: 29 %

Total number students who qualify: 148

If this method does not produce an accurate estimate of the percentage of students from low-income families, or the school does not participate in the free and reduced-price school meals program, specify a more accurate estimate, tell why the school chose it, and explain how it arrived at this estimate.

10. Students receiving special education services: 1 %

Total Number of Students Served: 5

Indicate below the number of students with disabilities according to conditions designated in the Individuals with Disabilities Education Act. Do not add additional categories.

0	Autism	1	Orthopedic Impairment
0	Deafness	0	Other Health Impaired
0	Deaf-Blindness	4	Specific Learning Disability
0	Emotional Disturbance	1	Speech or Language Impairment
0	Hearing Impairment	0	Traumatic Brain Injury
0	Mental Retardation	0	Visual Impairment Including Blindness
0	Multiple Disabilities	0	Developmentally Delayed

11. Indicate number of full-time and part-time staff members in each of the categories below:

	Number of Staff	
	Full-Time	**Part-Time**
Administrator(s)	2	0
Classroom teachers	31	0
Special resource teachers/specialists	2	1
Paraprofessionals	2	1
Support staff	8	1
Total number	45	3

12. Average school student-classroom teacher ratio, that is, the number of students in the school divided by the Full Time Equivalent of classroom teachers, e.g., 22:1 **16 :1**

13. Show the attendance patterns of teachers and students as a percentage. Only middle and high schools need to supply dropout rates. Briefly explain in the Notes section any attendance rates under 95%, teacher turnover rates over 12%, or student dropout rates over 5%.

	2007-2008	2006-2007	2005-2006	2004-2005	2003-2004
Daily student attendance	98%	98%	98%	98%	98%
Daily teacher attendance	96%	94%	95%	95%	94%
Teacher turnover rate	6%	6%	6%	6%	6%
Student dropout rate	0%	0%	0%	0%	0%

Please provide all explanations below.

Daily attendance for students and teachers far exceeds the state average. There are no dropouts. There is a 100% graduation rate.

14. For schools ending in grade 12 (high schools).

Show what the students who graduated in Spring 2008 are doing as of the Fall 2008.

Graduating class size	108	
Enrolled in a 4-year college or university	97	%
Enrolled in a community college	2	%
Enrolled in vocational training	0	%
Found employment	1	%
Military service	0	%
Other (travel, staying home, etc.)	0	%
Unknown	0	%
Total	**100**	%

PART III - SUMMARY

Brewbaker Technology Magnet High School (Brew Tech) is "dedicated to creating a learning community committed to discovery, innovation, collaboration and excellence." The vision, "to enrich, enlighten and empower," was created through a dynamic community partnership with the Montgomery Area Chamber of Commerce, Auburn University Montgomery, and the community at large. As a magnet school specializing in career development, it is open to all 9–12 grade students residing in Montgomery County who meet the basic requirements for enrollment. The small school size (504 students and growing) and the design principles of the windowed-seminar classrooms, many housing 24 computer stations, gives the distinct feeling of a high-tech work place.

Because of the relationship between vision and practice, Brew Tech students select a career academy, which includes college and career, E-commerce, building sciences, engineering, graphic design, information technology and medical, which is conducive to the area's needs for a technologically trained and highly literate workforce. The innovative technology-rich environment at Brew Tech supports many goals of the city's strategic plan, particularly the goals of building a competitive workforce and embracing diversity and enhancing leadership capacity.

The data explains it clearly-a 100% graduation rate; but Brew Tech's greatest achievement has been to create and sustain a learning environment that prepares a diverse group of students for post-secondary success, while mirroring the ethnic and socioeconomic diversity of the community. Students, particularly females and minority students entering the fields of math, science, and engineering express that when they get to college, the technology experience gained at Brew Tech gives them a competitive edge. To increase the number of students taking rigorous courses, Brew Tech has also partnered with A+ College Ready and is offering courses in Advanced Placement (AP) and Pre-AP courses in mathematics, science and English.

Brew Tech students won 3rd place in the South's BEST (Boosting Engineering, Science, and Technology) in 2003 and have won numerous Alabama BEST awards over the years. The Technology Student Association (TSA) had a national officer last year, and has had at least two students per year serve as state officers. In addition to the countless state and national trophies, students have won individual and group TSA events as well. Certifications and winning awards are just a starting point. Students are presented opportunities each day to develop and hone computer, software, and equipment skills that create the technology experts of tomorrow's world.

The linkages between secondary and postsecondary institutions are usually weak, not so at Brew Tech. We have built strong links with post secondary institutions, which is vital to students' success. For example, dual enrollment courses are offered in a high-tech laboratory, AP courses provide a link to college level course work, career academies use advanced technologies, and teachers communicate with students via computer folders. Consequently, staff members succinctly concur that technology fosters the preparation for future success. The Brew Tech mission is not only to provide students with a quality education and real-world skills that lead to careers for a lifetime, but also to utilize the skills to support others in the community and society as a whole. Students actively volunteer their talents by participating in community projects. For example, students from the Graphic Design Academy designed and printed historical panels for display at the Montgomery Children's Walk, one of the areas largest and most unified non-violent campaigns. In addition, the Medical Academy students volunteer yearly for the American Red Cross blood drive.

Partnerships like these benefit the entire community and reach far beyond our immediate vision. Students often make career choices based on these experiences. The Medical Academy's job shadowing component fits one of the Chamber's areas of high demand by giving juniors and seniors the opportunity to work toward a pre-RN track.

PART IV - INDICATORS OF ACADEMIC SUCCESS

1. **Assessment Results:**

Trends in our test data corroborate our focus of providing challenging learning experiences for all students. By tracking data over time, we are able to align instruction to desired outcomes for specific goals. We conduct meetings to monitor progress related to instruction, assessments, and intervention, especially related to language arts. The rigor in our curriculum is demonstrated through examination of our test scores using the Alabama High School Graduation Exam (AHEGE) (9-12), which is used for accountability at the high school level in Alabama. The 11th grade data is used as an accountability marker as required by the Alabama Department of Education. This exam covers reading, mathematics, language, science, social studies, and a new biology section.

Adequate Yearly Progress (AYP), as defined under the *No Child Left Behind Act* describes whether a school meets its goals in the areas of reading and mathematics. Brew Tech made AYP each year for all students in both areas. The data (AHSGE) for the past five years reveals that our students excel in the area of mathematics. All students (100%) met Level 3 (Passed) or exceeded Level 4 (Passed Advanced) standards. Our students in Level 4 ranged from 27% to 34%. Blacks and Whites had similar scores. Students classified as Poverty ranged from 17% to 27% in the Advanced Level 4 category, which is much higher than the State rate of approximately 10% to 11% scoring at the Advanced Level in this subgroup. There are very few disparities among subgroups of students.

Over the past five years, the trends reveal a 100% pass rate for 11th grade Language (AHSGE) students, except for the school years 2006-2007 and 2007-2008. During the school years 2006-2007 and 2007-2008 there were minimum decreases in Level 3 (98% and 99% respectively). For 12th grade the passing rate at Level 3 Language remained a constant 100% for Level 3 (Passed) or Level 4 (Passed Advanced).
For Reading 2003-2004 the 11th grade Reading scores were 32% Passed Advanced, while 68% received a Passing score. Beginning in 2004-2005 the categories changed to Level 1 & 2 (Does Not Pass), Level 3 (Pass), and Level 4 (Passed Advanced). During the next four school years, the 11th grade Reading data reflected consistent trends with only one student scoring Level 1 & 2 during the school year 2003-2004, and all other students scoring in Levels 3 (63%) and 4 (37%). School years 2005-2006, 2006-2007, and 2007-2008 reflected very high passing rates as well. Students scoring Level 4 (Passed Advance) ranged from 28% to 37%, while Level 3 (Passed) ranged from 63% to 72%. For 12th grade Reading 100% of all students (Poverty, Minority, Free or Reduced Lunch) were classified as Passed or Passed Advanced. These same students receiving a Passed Advance (Exceeds Academic Standards) ranged from 28% to 43% over the past five years. There were no disparities among subgroups. More information can be found at http://www.alsde.edu/html/home.asp.

2. **Using Assessment Results:**

Graphs are used to communicate assessment data to the faculty early in the school year. The graphs enable the faculty to depict overviews and details of the longitudinal data. A school team reviewed the data to determine priorities, and also examined the previous School Improvement Plan to determine mastery of previous goals. Later, the entire team (which included core subject teachers, academy teachers, and elective teachers) analyzed data from the AHSGE; Alabama Connecting Classrooms, Educators, and Students Statewide (ACCESS); Alabama Direct Assessment of Writing (ADAW); grade distributions; Career Tech data; STI discipline data; and student attendance data. The team then determined priorities for the current school year. The administrators later communicated to the staff specific information, strategies, and programs that were helpful. Providing useful information to the teachers produced effective results.

The faculty and staff encourage the ideas behind Best Practices, so at various team meetings, we ask ourselves logical questions, such as: “Are all students successful?” “What do we need to do differently?” Teachers use assessment data to identify at- risk students and to clarify where each student is with respect to learning

standards. This process is especially important as we continue to add Advanced Placement (AP) courses to our curriculum. By "digging deeper" into the data, we eliminate problem areas before they become insurmountable. For example, math teachers noticed that many new students struggled with advanced mathematical concepts. The students were unprepared for our stringent mathematics curriculum. In response to the problem, the math teachers developed a mathematics placement test for ninth grade students. By taking this action students were placed according to prior mathematics achievement. In turn, this placement positioned them for success. This collaborative effort reduces teacher and student frustration and consequently drives our goal to increase the number of students who successfully take AP classes.

3. **Communicating Assessment Results:**

The school communicates student performance, including assessment data, to parents, students, and the community in a variety of ways. Software Technology, Inc. (STI) for Parents, report cards, mail outs, and email are all utilized to keep parents and students informed. The yearly report card depicting assessments and AYP, which is issued by the State, is given to students and parents. Student performance is also routinely passed to parents during PTA meetings, as well as with personal letters. The administrators and the counselor communicate with parents concerning test scores and their relationship to financial aid and college scholarships, prerequisites to Advanced Placement (AP) classes, and graduation exam scores. Personal letters are sent to parents of students who need additional instructional support and to those who show potential in taking AP courses. Parents and community members are welcomed during school tours where assessment data and demographics are showcased.

Brew Tech has also been recognized nationally on various websites, such as www.usnews.com as a “Best High School,” and is also winner of a Bronze Medal Award, according to *US News & World Report*. Since parents are data conscious, these organizations analyze academic and enrollment data from more than 21,000 public high schools to find the best across the nation and then provide parents the data on www.schoolmatters.com. Links from these reports and research are available to parents at www.brewtech.org, the school’s website. Governor Bob Riley’s congratulatory remarks for Brew Tech’s Bronze Medal status were also available in the newspaper and online.

The Montgomery Advertiser often includes articles related to student performance, such as the Brew Tech College and Career Business Brunch. Over 178 people and dignitaries from the community attended this event. Community members and parents enjoyed the short business PowerPoint presentations. Student winners in contests such as Design an Add and United Way Posters are often featured in the newspapers. A local television station highlighted the Boosting Engineering, Science, and Technology (BEST) competitions. WSFA News filmed Brew Tech’s robot in action and interviewed team members.

4. **Sharing Success:**

Brewbaker Technology Magnet High School continuously shares its tradition of successfully creating a learning environment where students exceed the academic standards year after year. At Brew Tech, we share our success formally and informally with the local community and throughout the southeast region. Through vertical teaming, we work effectively with our feeder middle school sharing ideas and instructional strategies to mirror the many innovative programs that have contributed to our success. Also, Brew Tech is the pioneer of the modified block schedule in Montgomery County. Because of our great success, five of the other six high schools will convert to this schedule using Brew Tech as the model.

Each year in January, Brew Tech has eight tour dates where interested students and parents can arrange a 1.5-hour tour of the school. The tour begins with a welcome and 20-minute PowerPoint presentation by the principal. Brew Tech students (“the Ram Hosts”), walk the visitors throughout the school and answer additional questions. The Brew Tech culture of discovery, innovation, collaboration, and excellence is woven into the

fabric of the school, and staff, faculty, students, and parents communicate to others the high expectations and congenial learning environment at Brew Tech.

On a broader scale, just this year a team of school board members and teachers from another county toured Brew Tech to see first hand our school facilities, experience our school climate, and review our curriculum. As a result, this system will model their newly constructed high school after Brew Tech, incorporating many of the concepts and practices that have made our school unique and successful. At Brew Tech, we relish the idea of sharing our success with other schools in Montgomery County and throughout the state. If given the honor of being distinguished as a Blue Ribbon School, it would provide an even greater opportunity to share our school success story with a broader audience.

PART V - CURRICULUM AND INSTRUCTION

1. **Curriculum:**

The curriculum at Brewbaker Technology Magnet High School is built around the academy concept with an underlying support formed by the use of technology. The academy concept is imbedded into the academic curriculum. This unique concept, along with project-based and cooperative learning, helps prepare students for future goals.

The academic curriculum follows national and state standards. Curriculum guides and the Alabama Courses of Study are used to plan instruction and determine timeframes. The curriculum, as determined by the Alabama State Department of Education, challenges students by utilizing research-based projects, higher ordered thinking skills, and interdisciplinary activities. ACCESS (on-line classes), College-Prep. (honors and Pre-AP), Advanced Placement, and Dual Enrollment classes are offered for those students that want to challenge themselves further. Through a recent AP grant awarded to Brew Tech, the AP program has been expanded to offer more AP classes. Teachers have received extensive training on how to effectively deliver this AP curriculum to the students.

Brew Tech offers the following academies: Information Technology, Engineering, Building Science, E-Commerce, Medical, Graphic Design, and College and Career. The Academies are part of the Career Technical education program. All Career Tech programs are Business Industry certified as mandated by the Alabama State Department of Education. Many of the academies are college preparatory classes that will better prepare students for the post-secondary academic world. Each academy requires students to obtain a certain number of community service hours each year.

Brew Tech also offers various electives that include the visual arts and foreign language. More than 37% of students take a foreign language. An advanced diploma requires two years of a foreign language. Spanish I, II, and II are offered. Students may also take other foreign languages, such as Latin in the ACCESS computer lab. One student passed the AP Chinese exam last year. The visual arts classes include Art I, II, and III. The Graphic Design Academy exposes students to the elements and principles of art and design, art history, object design, information design, experience design and production in all media utilized in the field of visual communication. Visual arts students are consistently challenged to demonstrate their knowledge, skills, and abilities by competing in local, state and national competitions.

Students are also actively engaged in extra-curricular activities that support the academic and academy curriculum. Clubs geared toward each academy are open to membership. Students also participate in a variety of service organizations. Brew Tech's unique situation offers many opportunities for enhancement of the curriculum through community resources. Guest speakers are scheduled in all areas of the curriculum, to speak on various topics. On-site and virtual field trips, which expose the students to specific career fields related to the curriculum, are organized.

Mathematics, English, science, and history are the core classes. Brew Tech offers regular, honors, and AP classes in each area. In addition to the core classes, a range of electives, including journalism and speech are also offered. Each curriculum follows the guidelines set by the Alabama Courses of Study. The use of technology is encouraged in all classrooms. Teachers use multiple sources of technology for delivering instruction such as data video projectors, smart boards, WACOM tablets, intranet classroom folders, online materials (e-mail, textbooks, and virtual classroom), and Probe Ware for science labs. Based on high standards, Brew Tech offers a research-based curriculum that supports best practices and clearly defines expectations for student learning.

Brewbaker Technology Magnet High School consistently makes use of instructional strategies and provides services that facilitate learning for all students. Quality education and student achievement are the highest

priorities among the instructional staff. The administration and staff ensure that the climate of the school is collegial in nature and conducive to teaching higher standards. Teachers use planning time to ensure that they develop lessons that actively engage students in the learning process.

2b. **(Secondary Schools) English:**

The English language curriculum is complex and challenging for all students in grades nine through twelve. Regular 9th grade English to Advanced Placement (AP) Language and Composition and AP Literature and Composition emphasize reading, writing, research, and oral communication skills. Honors (Pre-AP) classes, designed for students who have a strong foundation in reading, writing, and analyzing literature, prepare students for upper level AP classes. The AP Language and Composition classes are designed to engage students in analysis of nonfiction and in the study of the writing process. Critical analysis of various literary genres is undertaken in the AP Literature and Composition classes. Ninth and tenth grade regular classes and honors classes address the writing standards assessed by the Alabama Direct Assessment for Writing and the standards for language and literature established by the Alabama Course of Study. Teaching is carefully aligned to the content standards.

Using the Alabama Course of Study, the Alabama High School Graduation Exam, and differentiated instruction, teachers identify appropriate supports for students who read below grade level. For example, teachers use strategic teaching with specific outcomes in mind. A strategic lesson involves a before, during, and after reading activity as well as an assessment of the lesson. Teachers use graphic organizers to provide visual models of a text, as well as provide interesting reading texts and collaborative activities to engage students. Some students who have difficulty reading, such as ESL students, use textbooks on CDs to read and listen to literary pieces.

All students have the opportunity to produce assignments through hands-on projects, such as dramatic monologues, multigenre projects, panel discussions, school newsletters, skits, speeches, Poetry Coffee House projects, and other presentations involving real-world skills. To enhance support for students reading below grade level, intervention and remediation are carried out through the use of small group work, peer tutoring, individualized instruction, data driven instruction, and tutoring before or after school.

3. **Additional Curriculum Area:**

Brew Tech was founded on technology and high standards. Students learn Computer Aided Drafting, FrontPage, Excel, PowerPoint and Photoshop in a hands-on environment. Through the use of technology, the students gain real-world skills for a successful future within our global community. Windowed-seminar classrooms with dividing partitions, TecTV, and data-capturing equipment create a high-tech atmosphere for Brew Tech students. Brew Tech is the only school within the system in which students can receive CompTIA Certification in the Information Technology (IT) Academy. Each academy utilizes the latest technology in its field, while teachers who teach core courses and electives also integrate computer technology into learning activities.

Brew Tech students pursue innovative experiences, which require highly technical, project-based learning. Students are attracted to Brew Tech because it gives them an edge as they enter college and the work world. The students, teachers, and administrators use technology as an integrated tool for teaching, learning, and mastering local, state, and national standards. Through the use of technology the students learn to be creative thinkers, writers, speakers, and gain other real-world skills. They continuously work on projects that require teamwork, organize themselves, and present projects with pride to their classmates. Students have won many BEST (Boosting Engineering, Science, and Technology) awards, and also have placed in the Alabama Council for Technology Educators annual competition.

Students use data-capture equipment in ACCESS, and Distance-Learning classes. Desktop Publishing, Business Technology Essentials and Integrated Computer Technology classes are also a part of the technology

curriculum. Students' assignments are submitted paperless by dropping their assignments into teacher's folders and then teachers grade and return them via the folders. The librarian encourages use of many web-based resources across the curriculum such as the Alabama Virtual Library, Discovering Collections, The Learning Express, ACT and SAT preparation, Teaching Books, Athena, and United Streaming.

4. **Instructional Methods:**

Differentiated instruction is utilized in a variety of lessons to reach the diverse group of students in each classroom. Teachers select materials on various reading levels and choose alternate assessments, such as projects, that allow students to make choices as to how to display their knowledge. The use of manipulatives, charts and pictures, colored pencils and measuring tools, calculators and Smart Board illustrations engage kinesthetic, visual, and logical learners. For example, teachers may use a hands-on colored paperclip activity to balance chemical equations, which illustrates the conservation of mass theory. Students build the reactant molecules by rearranging the paperclips. This process demonstrates the products of the reaction. The basic activity is on a concrete level, but can easily be modified for more advanced students. This activity becomes a mid-range activity for predicting the products of a chemical reaction by combining paperclips and modifying equations. Then, finally students would balance the equations. This activity engages the kinesthetic, visual-spatial, and logical learners.

The paperclip activity would precede a chocolate chip cookie lab, in which students on different levels would perform a variety of tasks. At the most basic level, students would concretely balance the ingredients (reactants) in the chocolate chip recipe. For a more advanced task, after balancing the ingredients, students would calculate the individual mass of each ingredient (reactant) and the mass of the cookies (product). Then, students would use the information to discuss the conservation of mass. For the most advanced activity, students would predict the products of the balanced equations to verify the conservation of mass theory.

Additionally, teachers often differentiate instruction through the use of flexible grouping, pre-assessments, learning contracts, journals, Socratic seminars, open-choice reading assignments, inclusion of the arts, and multicultural considerations. No matter the teacher or the course at Brew Tech, students' needs and learning styles are considered so that they can acquire academic knowledge and success as they work together to solve problems.

5. **Professional Development:**

The school's professional development program is directly tied to student achievement so that it has a positive impact on our students' learning. Our professional development is based on the State's Professional Development Standards, PDPs from teachers' PEPEs, as well as from best practices (vertical team training) and capacity building (new teacher knowledge). Our goal of continuous school improvement focuses on and aligns instruction, curriculum, and assessments to improved student achievement.

One area of particular importance to us and that meets our vision of providing a rigorous curriculum is our new Advanced Placement (AP) courses, which has allowed us increase the enrollment and success of our students in math, science, and English. Adding these courses has provided a great opportunity for our school to strengthen its core courses. Through intensive professional development, using outside experts, support for teachers, and peer coaching, we ensure that we sustain a learning environment that prepares students for post-secondary success!

Our professional development has a tremendous and immediate impact on the community, as well as on our individual student body. For example, some of our AP Biology and AP Chemistry students are also in our Medical Academy. These students job shadow in the community as seniors. The labs and content standards for these classes help prepare our students before they enter the medical field. For instance, the training for the chemistry teacher covers topics very thoroughly with an emphasis on chemical calculations, the formulation of

mathematical principles, and advanced laboratory activities. This core content also moves toward the "Big Ideas of the Essential Content" from the AP Science Redesign. Consequently, not only significant content standards are covered, but best practices for current practices are also embedded into the training. This is a cyclic process involving professional development aligned to content standards resulting in student learning.

6. **School Leadership:**

The leadership of the school is anchored by the principal who has over 25 years leadership experience in secondary education and the US Air Force combined. The assistant principal and the school counselor also bring a wealth of knowledge to the team through their extensive formal education and training and years of experience in secondary education. The school leadership team consists of teachers from each academic discipline and also representatives from the support staff. The principal employs shared decision making and practices the tenants of Total Quality Management where faculty and staff members are routinely asked for their opinions and ideas for improving the efficiency and quality of the school. The principal champions the idea that leadership decisions are made and policies implemented based on "what's in the best interest of our students."

Each Tuesday morning the principal meets with the leadership team to review school policies, student academic progress, school climate issues, and to formulate plans for the next school year. Through the use of data provided by the Alabama State Department of Education, A+ College Ready, and the school Continuous Improvement Plan (CIP), the principal guides the leadership team in setting goals for student academic achievement. State standardized test scores have shown a steady increase in the number of student scoring proficient and advanced across all demographic groups, and the achievement gaps between races and genders are now virtually non-existent. The recent addition of more Advance Placement (AP) classes has provided more rigor to the curriculum and given students the preparation needed to be successful at the college level. The success of the school was further echoed by *US News & World Report* when it named Brewbaker Technology Magnet High School as one of the best schools in America in 2009.

PART VII - ASSESSMENT RESULTS

STATE CRITERION-REFERENCED TESTS

Subject: Mathematics Grade: 11 Test: Alabama High School Graduation Exam

Edition/Publication Year: 3rd/2002 Publisher: Alabama State Dept of Ed

	2007-2008	2006-2007	2005-2006	2004-2005	2003-2004
Testing Month	Mar	Mar	Mar	Mar	Mar
SCHOOL SCORES					
Percent Passed	100	100	100	100	100
Passed Advanced	27	29	27	34	27
Number of students tested	100	106	105	88	116
Percent of total students tested	100	97	99	97	97
Number of students alternatively assessed	0	0	0	0	0
Percent of students alternatively assessed	0	0	0	0	0
SUBGROUP SCORES					
1. Free and Reduced Lunch/Socio-Economic Disadvantaged Students					
Percent Passed	100	100	100	100	100
Passed Advanced	19	26	17	17	25
Number of students tested	21	19	23	12	20
2. Racial/Ethnic Group (specify subgroup): Black					
Percent Passed	100	100	100	100	100
Passed Advanced	28	28	25	25	25
Number of students tested	54	57	49	40	56
3. (specify subgroup): White					
Percent Passed	100	100	100	100	100
Passed Advanced	23	28	27	38	26
Number of students tested	43	43	52	45	52
4. (specify subgroup):					
% Proficient plus % Advanced					
% Proficient plus % Advanced					
Number of students tested					

Notes:

Subject: Reading Grade: 11 Test: Alabama High School Graduation Exam

Edition/Publication Year: 3rd/2002 Publisher: Alabama State Dept of Ed

	2007-2008	2006-2007	2005-2006	2004-2005	2003-2004
Testing Month	Mar	Mar	Mar	Mar	Mar
SCHOOL SCORES					
Percent Passed	100	99	100	99	100
Advanced Passed	28	29	37	40	31
Number of students tested	100	106	105	88	116
Percent of total students tested	100	97	99	97	97
Number of students alternatively assessed	0	0	0	0	0
Percent of students alternatively assessed	0	0	0	0	0
SUBGROUP SCORES					
1. Free and Reduced Lunch/Socio-Economic Disadvantaged Students					
Percent Passed	100	95	100	100	100
Advanced Passed	24	26	35	25	10
Number of students tested	21	19	23	12	20
2. Racial/Ethnic Group (specify subgroup): Black					
Percent Passed	100	100	100	100	100
Advanced Passed	22	33	33	33	30
Number of students tested	54	57	49	40	56
3. (specify subgroup): White					
Percent Passed	100	100	100	100	100
Advanced Passsed	35	28	39	49	32
Number of students tested	43	43	52	45	52
4. (specify subgroup):					
% Proficient plus % Advanced					
% Proficient plus % Advanced					
Number of students tested					

Notes:

Subject: Mathematics Grade: 12 Test: Alabama High School Graduation Exam
Edition/Publication Year: 3rd/2002 Publisher: Alabama State Dept of Ed

	2007-2008	2006-2007	2005-2006	2004-2005	2003-2004
Testing Month	Mar	Mar	Mar	Mar	Mar
SCHOOL SCORES					
Percent Passed	100	100	100	100	100
Passed Advanced	27	29	27	34	27
Number of students tested	100	106	105	88	116
Percent of total students tested	100	97	99	97	97
Number of students alternatively assessed	0	0	0	0	0
Percent of students alternatively assessed	0	0	0	0	0
SUBGROUP SCORES					
1. Free and Reduced Lunch/Socio-Economic Disadvantaged Students					
Percent Passed	100	100	100	100	100
Passed Advanced	19	26	17	17	25
Number of students tested	21	19	23	12	20
2. Racial/Ethnic Group (specify subgroup): Black					
Percent Passed	100	100	100	100	100
Passed Advanced	28	28	25	25	25
Number of students tested	54	57	49	40	56
3. (specify subgroup): White					
Percent Passed	100	100	100	100	100
Passed Advanced	23	28	27	38	26
Number of students tested	43	43	52	45	52
4. (specify subgroup):					
% Proficient plus % Advanced					
% Proficient plus % Advanced					
Number of students tested					

Notes:

Subject: Reading Grade: 12 Test: Alabama High School Graduation Exam

Edition/Publication Year: 3rd/2002 Publisher: Alabama State Dept of Ed

	2007-2008	2006-2007	2005-2006	2004-2005	2003-2004
Testing Month	Mar	Mar	Mar	Mar	Mar
SCHOOL SCORES					
Percent Passed	100	99	100	99	100
Advanced Passed	28	29	37	40	31
Number of students tested	100	106	105	88	116
Percent of total students tested	100	97	99	97	97
Number of students alternatively assessed	0	0	0	0	0
Percent of students alternatively assessed	0	0	0	0	0
SUBGROUP SCORES					
1. Free and Reduced Lunch/Socio-Economic Disadvantaged Students					
Percent Passed	100	95	100	100	100
Passed Advanced	24	26	35	25	10
Number of students tested	21	19	23	12	20
2. Racial/Ethnic Group (specify subgroup): Black`					
Percent Passed	100	100	100	100	100
Passed Advanced	22	33	33	33	30
Number of students tested	54	57	49	40	56
3. (specify subgroup): White					
Percent Passed	100	100	100	100	100
Passed Advanced	35	28	39	49	32
Number of students tested	43	43	52	45	52
4. (specify subgroup):					
% Proficient plus % Advanced					
% Proficient plus % Advanced					
Number of students tested					

Notes: